Remarks/Arguments:

Please cancel claims 1-7 and add claims 8-17.

In response to complaint 2) Claim Objections that claims 4-7 were in improper multiple dependent form, claims 4-7 were canceled and claims 14-17 were added in proper multiple dependent form.

In response to complaint 3) Claim Rejections- 35 USC § 101, 4) - 4.2) Claim Rejections- 35 USC § 112, and 5) Claim Rejections- 35 USC § 112, claims 1-3 were canceled and new claims 8-13 were added. Claim 8 was added to replace claim 1, deleting the method steps attributed to access tokens in claims 1. Claim 9 was added, using the method steps attributed to claim 1. Claim 10 was added to replace claim 2, deleting the method steps attributed to the intelligent agent in claim 2. Claim 11 was added using the method steps attributed to the intelligent agent in claim 2. Claim 12 was added to replace claim 3, deleting the method steps attributed to access tokens in claim 3. Claim 13 was added, using the method steps deleted from claim 3.

In response to Complaint 3.2) Claim Rejections – 35 USC § 101, suggesting the redrafting of claims 1-3 to include a computer readable medium so that the claimed software in combination with a computer readable medium will be capable of producing a useful, concrete and tangible result, Claims 1-3 were canceled and new claims 8, 10, and 12 were added to replace them. Claim 8, previously Claim 1, was written or rewritten to include a computer readable medium capable of

producing a useful, concrete and tangible result when combined with computer software. Claim 10, previously Claim 2, was written or rewritten to include a computer readable medium capable of producing a useful, concrete and tangible result when combined with computer software. Claim 12, previously Claim 3, was written or rewritten to include a computer readable medium capable of producing a useful, concrete and tangible result when combined with computer software. It should be noted that the machine readability of computer programs and of data packets, as well as their storability on a storage medium, as well as their connectivity to electric power sources, is assumed throughout this application as part of the normal setup of electronic data systems.

In response to Complaint 4.1, Claim Rejections – 35 USC 112, suggesting clearly and positively specified language, claims 1-3 were canceled and claims 8, 10, and 12 were added with language that positively set forth the structure and the interconnection of the elements with each other.

In response to Complaint 4.3) Claim Rejections 35 USC § 112, requesting indication of the relationship between the structural elements in claims 1-3, claims 1-3 were canceled and claims 8, 10, and 12 were added. Claim 8, previously claim 1, was written or rewritten to indicate the relationship between the different structural elements. Claim 10, previously Claim 2, was written or rewritten to indicate the structural relationship between the electronic money and the software control program and to show how they are integral and related to each

other to execute the application. Claim 12, previously Claim 3, was written or rewritten to indicate the relationship between the different structural elements. The relationship was denoted by adding the phrases "for the purpose of" or "to enable" to clarify the nature of the system.

Complaints 6) - 7) Claim Rejections 35 U.S.C. § 102 are objected to because the prior art does not teach each and every element and limitation of the invention. Although, there is similarity between the patents in that they all deal with e-payment schemes to create secure ways to transfer and store money electronically, and to pay electronically for transactions, the prior art is not anticipatory. The prior art schemes do not operate on the packet level, and do not assign information packets with the means and the ability to transact directly. The key aspects of the claimed innovation are not primarily an innovation of electronic payment tokens or of electronic wallets, but an innovation of creating data packets that can engage in exchange transactions. This includes, first, the inclusion of the payment means (the access tokens) inside the same packet as the information "payload" itself, and, second, the inclusion of control capability in that information packet. Thus, the data packet would come with resources (be "rich") and control (be "smart"). With these elements, the data packet could engage in transactions without centralized or even peripheral control. Claim 8, previously Claim 1. Claim 10, previously Claim 2, embeds the money not in the information data packet itself but in a larger program, that of an intelligent agent (info-bot), enabling that intelligent agent to transact independently. Claim

12, previously Claim 3, has the electronic money placed in the packet without the control capability, leaving transactions to pre-programmed transactions at the various facilities. Claim 14 (previously Claim 4) permits a transaction data packet to transact in behalf of several "follower packets", still maintaining control by the "smart" and rich" packet. Claim 15 (previously Claim 5) permits the division of the controller functions and wallet functions to be spread over several transaction data packets. This is useful if these programs are lengthy, and still maintains "smart" and "rich" packets. Claim 16 (formerly Claim 6) permits the transaction data packet to include also other software programs beyond the packet controller and the access tokens, thus expanding the capability of the transaction data packets to engage in additional types of performance. Finally, Claim 17 (previously Claim 7) creates facility gateways that are remote from their actual facilities, thus enabling transactions at a distance from the facilities. This permits the emergence of markets. For example, there could be automized markets for transmission capacity, in which network facilities' gateways offer services at some common nodes, and transactions packets bid for these services through their packet controller, pay for them through access tokens, and get routed to whatever network they entered into a transaction with.

None of these elements of rich and smart information packets is present in the previously granted patents. I will discuss them in the order mentioned in your document.

Wong (US 5,913,203; (1999)) creates pseudo cash as a separate electronic coin, but not as part of the information packet itself. Furthermore, it requires individual action through the insertion of a user key to generate the cash and activate the system. There is no packet controller, or an intelligent agent. Instead, Wong's system relies on transactions between remote computer devices, and value stored in a computer's memory. Wong creates a means of sending payments from one party to one or more other parties. To analogize: He creates money, and a postal system to dispatch it, like a modern version of wire money transfer. In contrast, the innovation of this application is to create an independent smart agent or data packet that combines logic, means of payment, and payload—like a truck with a skilled driver and a wallet, capable of navigating and re-routing based on prices and other conditions met along the way. Even previous Claim 3, (now Claim 12) which comes closest to Wong among the claims, creates an integrated packet of information and payload, and can also receive payment as well as make it. None of this is present in Wong.

Similarly, Mori (5,854,581 (1998)) describes a system linking a host computer with customer credit-type cards. The host computer can update the balance of the account stored. At no point is electronic money integrated with any information payload, or with an independent control function, or is an information payload released outside the direct control of the host computer.

Similarly, Ohki (US 5,952,639; (1999) deals with a smart-card technology interacting with ATMs to deposit or withdraw cash. It bears none of

the "invisible hand' aspects of information packets transacting on their own with embedded money and controllers.

Teicher (US 6,467,685 B1 ; (2002)) addresses the security aspects of electronic money transaction, by creating serial identification coupled with sampling techniques. That innovation deals with a different problem, and specifically aims to "monitor centrally" 1-53.

Nikander (US 6,029,151; (2000)) creates a very different system, in which the Internet service provider takes care of micropayment clearance by creating charges on the user's phone bill for transactions with third parties. This system exists similarly for mobile cellular networks and their use as billing system for small transactions. There is no anticipation.

Teicher (US 6,119,946; (2000)) provides a smart card system, similar to the one of Teicher (US 6,467,685 B1) discussed above, and the same differentiation applies.

Mori (US 6,338,048 B1; (2002)) is centered on ATM transactions, and requires customer cards, customer accounts, and pre-decided settlement conditions. It, too, does not integrate information payload with money or controller intelligence, and leaves them out of its control.

Claus (US Pub H1794; (1999)) deals with smart card hierarchies as a way to simplify transactions. There is no overlap with the proposed innovation.

Joao et al. (US 20002/0051920 A1; (2001)) provides for a centralized payment authorization method through a central processing computers, smart cards, and point-of-sale devices. It, too, is a system that maintains control and does not create smart and rich packets transacting on their own.

Articles cited as prior art are Sheehan, Kevin "Electronic Cash", FDIC Banking Review, Washington 1998, Vol. 11, ISS.2, pp 1-8. This article describes electronic cash. It is not the claim of the present innovation to have invented electronic cash. There have been a number of proposals or implementations of such systems. However, none of them has embedded the payment token inside the information packet itself, or combined it with a packet controller. The present innovation is not of electronic money but of "rich" and "smart" packets utilizing the electronic money tokens.

Similarly, the article by Talmor, " A Chip off the old stripe", The Banker, London, Oct 1994, pp 1-4 describes smart cards with an electronic purse, i.e. a stored value card. Again, it is not the claim of the present innovation to invent an electronic purse. Rather, its innovation lies in including this purse inside the packet itself, traveling with the information across networks.

In addition to those patents and articles, I have also identified several other patents that are related but distinct. Rowney (US 5,987,140; (1999)) creates a secure transmission system for electronic payments. Biffar (US 5,903,880; (1999)) creates a payment system requiring a dynamic log record in which the issuer keeps track of transactions. Hill (US 6,236,981 B1; (2001) describes an electronic payment system creates user-specific IDs for affecting payment instructions, under the control of the party initiating transactions. Curry et al. (US 5,949,880; (1999)) establishes a security system for electronic payments. None of these patents creates the "smart" and "rich" packets.

I have earnestly tried to find an overlap in these patents and articles, since any search of prior art might miss important innovations that have occurred at the same time. But the additional patents and articles provided to me actually strengthen my confidence in the novelty of my application. Just as the concept of data packets and of packet switching, novel in the 1960s, revolutionized data communications and enabled the Internet, so does my expansion of this concept to incorporate means of payment and of control enable decentralized electronic transactions, and can be the basis for an entirely new level of network development and electronic transactions.

I will be happy to clarify this further with you in any means you wish to use. As stated earlier a check for $ 475.00 in payment for the petition of extension of time from the shortened unstatutory reply period of 3 months to the 6 month statutory time period has been included. If any

other fee payments are required, please notify the above, and payment will be made immediately.

Sincerely yours,

Eli Noam
Professor, Columbia University

US 5,913,203 to Wong et al. (1999) *System and Method for Pseudo Cash Transactions*

US 2001/0051920 A1 to Joao et al. (2001) *Financial transaction and/or wireless communication device authorization, notification and/or security apparatus and method*

US 6,338,048 B1 to Mori (2002) *Electronic Transaction System*

US 6,119,946 to Teicher *Countable Electronic Monetary System and Method*

US 5,854,581 to Mori et al. (1998) *Transaction Processing System and Transaction Processing Method*

US 6,029,151 to Nikander *Method and System for Performing Electronic Money Transactions*

H 1794 to Claus (1999) *Secure Money Transfer Techniques Using Hierarchical Arrangement of Smart Cards*

US 6,467,685 B1 to Teicher (2002) *Countable Electronic Moneatary System and Method*

US 5,952,639 to Ohki et al. (1999) *Depositing, Withdrawing, Balance Check, Exchange and Transfer of Electronic Money in Automatic Cash Handling Machine*

US 5,987,140 to Rowney et al. (1999) *System, Method and Article of manufacture for secure network electronic payment and credit collection*

US5,903,880 to Biffar (1999) *Self-Contained Payment System with Circulating Digital Vouchers*

US 6,236,981 B1 to Hill (2001) *Transaction System*

US 5,949,880 to Curry et al. (1999) *Transfer of Valuable Information Between a Secure Module and Another Module*